

1 (presently amended). A multiple transport method for enabling a conditional access module to handle any of a plurality of transport stream formats, ~~said~~ the multiple transport method comprising:

qualifying received data bytes according to their positions and values within a data packet; and

attaching a multi-bit tag to each received data byte, ~~such~~ the tag containing information required for further processing of the byte.

2 (presently amended. The multiple transport method according to claim 1, further comprising examining each of said bytes to determine if ~~it~~ said byte is a header byte.

3 (presently amended). The multiple transport method according to claim 2, further comprising determining whether ~~the~~ said byte contains channel identification data.

4 (presently amended). The multiple transport method according to claim 3, ~~including~~ further comprising performing an adaptation field test.

5 (presently amended). The multiple transport method according to claim 4, ~~including~~ further comprising determining whether ~~the~~ said byte is a payload byte.

6 (presently amended). The multiple transport method according to claim 5, ~~including~~ further comprising determining whether ~~the~~ said data in ~~the~~ said byte is scrambled or clear.

7 (presently amended). The multiple transport method according to claim 1, ~~including~~ further comprising producing a stream of output bytes which are no longer dependent on the particular transport stream format in which ~~they~~ the stream arrived at ~~the~~ said conditional access module.

8 (presently amended). A multiple transport system for enabling a conditional access module to handle any of a plurality of transport stream formats, ~~said~~ the multiple transport system comprising:

a qualification mechanism for processing received data bytes according to their positions and values within a data packet; and

a tagging mechanism for applying a multi-bit tag to each received data byte, ~~such~~ the tag containing information required for further processing of the byte.

9 (presently amended). The multiple transport method according to claim 8, ~~including~~ further comprising a mechanism for examining each of said bytes to determine if ~~it~~ said byte is a header byte.

10 (presently amended). The multiple transport system according to claim 9, further comprising a mechanism for determining whether ~~the~~ said byte contains channel identification data.

11 (presently amended). The multiple transport system according to claim 10, ~~including~~ further comprising a mechanism performing an adaptation field test.

12 (presently amended). The multiple transport system according to claim 11, ~~including~~ further comprising a mechanism for determining whether ~~the~~ said byte is a payload byte.

13 (presently amended). The multiple transport system according to claim 12, ~~including~~ further comprising a mechanism for determining whether ~~the~~ said data in ~~the~~ said byte is scrambled or clear.

14 (presently amended). The multiple transport system according to claim 8, ~~including~~ further comprising a mechanism producing a stream of output bytes which are not dependent on the particular transport stream format in which ~~they~~ the stream arrived at ~~the~~ said conditional access module.

15 (presently amended). The multiple transport system according to claim 8, configured to receive input transport streams formatted according to at least one of MPEG, DSS and ATM transport stream formats.

(original)
16. The multiple transport system according to claim 8 configured to receive packet-type and cell-type transport structures.

17 (presently amended). A multiple data transport mechanism capable of receiving a plurality of different transport stream formats, ~~such~~ the mechanism comprising:

a qualifying mechanism for receiving and qualifying incoming data bytes according to their positions and values in their plural-byte data packets; and

a tagging mechanism for assigning a plural-bit tag to each data byte, ~~such~~
the tag having a value determined by the results of ~~the~~ a qualifying process
performed by the qualifying mechanism.

18 (presently amended). A method for handling any of a plurality of
transport stream formats, ~~said~~ the method comprising:

qualifying each received data byte[[s]] according to ~~their~~ its position[[s]]
and value[[s]]; and

attaching a tag to each received data byte.

19-32 (cancelled).

33 (presently amended). A digital signal receiving system comprising:
an input signal channel for receiving a digital signal stream which carries digital television signals, wherein the data stream is transmitted in one of a plurality of different digital signal formats;

transmission format converter circuitry for converting the incoming data stream into a transmission format independent set of digital television signals , the converter circuitry further comprising a qualifying mechanism for receiving and qualifying each incoming data byte according to its position and value in its plural- byte data packet and further comprising a tagging mechanism for assigning a plural-bit tag to each data byte, the tag having a value determined by the results of a data byte qualifying process performed by the qualifying mechanism; and

a digital display mechanism for converting the transmission format independent digital television signals into a visual image , wherein the digital signal receiving channel further comprises signal processing circuitry, responsive to the tagged data bytes, for supplying television signals to the television display mechanism.

34 (cancelled).

35 (presently amended). A digital signal receiving system in accordance with claim ~~34~~ 33, wherein ~~the~~ said qualifying mechanism comprises a parser mechanism for analyzing said data bytes and determining their relationships to other data bytes in a plural-bit data packet.

36 (presently amended). A digital signal receiving system comprising:
at least two input signal channels for receiving at least ~~two~~ first and
second digital signal streams, ~~one of which~~ where the first stream carries digital
television signals and the ~~other of which~~ second stream carries digital message
signals, wherein each data stream is transmitted in one of a plurality of different
transmission formats;

transmission format converter circuitry for converting each incoming data
stream into a common transmission format independent set of signals;

a television display mechanism for converting the transmission format
independent television signals into a visual image; ~~and~~

a message processing mechanism for converting the transmission format
independent message signals into user perceivable messages.

a first qualifying mechanism for receiving and qualifying incoming
television signal bytes according to their positions and values in their plural-bit
data packets;

a first tagging mechanism for assigning a plural-bit tag to each received
television signal byte, the television tag having a value determined by the results
of a qualifying process performed by the first qualifying mechanism;

first signal processing circuitry, responsive to the tagged television signal
bytes, for supplying television signals to the television display mechanism;

a second qualifying mechanism for receiving and qualifying incoming
message signal bytes according to their positions and values in their plural-bit
data packets;

a second tagging mechanism for assigning a plural-bit tag to each received
message signal byte, the message tag having a value determined by the results of
a qualifying process performed by the second qualifying mechanism; and

second signal processing circuitry, responsive to the tagged message

signal bytes, for supplying message signals to the message processing mechanism.

37 (cancelled).

38 (presently amended). A digital signal receiving system in accordance with claim ~~37~~ 36, wherein each of said first and second qualifying mechanisms comprises a parser mechanism for analyzing said received data bytes and determining their relationships to other data bytes in a plural-bit data packet.

39 (presently amended). A digital signal receiving system for receiving a plurality of different digital data transport stream formats, ~~such~~ the system comprising:

a qualifying mechanism for receiving and qualifying incoming data bytes according to their positions and values in their plural-byte data packets;

a tagging mechanism for assigning a plural-bit tag to each data byte, ~~such~~ the tag having a value determined by the results of ~~the~~ a qualifying process performed by the qualifying mechanism; and

a signal processing mechanism, responsive to the tagged data bytes, for producing digital information signals.

40 (presently amended). A multiple data transport mechanism for receiving a plurality of different digital data transport stream formats, ~~such~~ the mechanism comprising:

a qualifying mechanism for receiving and qualifying incoming data bytes according to their positions and values in their plural-byte data packets; and

a tagging mechanism for assigning a plural-bit tag to each data byte, ~~such~~

~~the~~ tag having a value determined by the results of ~~the~~ a qualifying process performed by the qualifying mechanism.

41 (presently amended). A multiple data transport mechanism in accordance with claim 40, wherein ~~the~~ said qualifying mechanism comprises a parser mechanism for analyzing said data bytes and determining their relationships to other data bytes in a multi-byte data packet.

42 (presently amended). A multiple data transport mechanism for receiving a plurality of different digital data transport stream formats, wherein data is conveyed in multi-byte data packets, with each packet having a plural-byte header field and a plural-byte payload field, ~~such~~ the mechanism comprising:

- a first testing mechanism for examining each incoming data byte and determining whether the data byte is a header byte or a payload byte;

- a first tagging mechanism, coupled to the first testing mechanism, for assigning header byte indicative tags to the header field data bytes and assigning payload indicative tags to the payload field data bytes;

- a second testing mechanism for examining each incoming data byte and determining whether the data is scrambled;

- a second tagging mechanism, coupled to the second qualifying mechanism, for assigning a scramble condition tag bit to each data byte and giving the data tag bit ~~one~~ a first binary value if the data is scrambled and ~~the~~ either a second binary value if the data is not scrambled; and

- signal transfer circuitry for transferring each data byte and its assigned tag bits to a data processing mechanism for producing usable digital information.